

a² 14. The balloon catheter according to any one of claims 1 to 3 and 6 to 8, wherein the innermost surface of said first tubular member is configured from a high-density polyethylene.

a³ 16. The balloon catheter according to any one of claims 1 to 3 and 6 to 8, wherein said balloon is made from a polymer blend material of a first polymer component and a second polymer component that are each thermoplastic elastomers having a hard segment and a soft segment; said first polymer component has a higher Shore hardness than said second polymer component; and both said first polymer component and said second polymer component are thermoplastic elastomers having hard segments with same repeating unit structure and soft segments with same repeating unit structure.

18. The balloon catheter according to claim 16, wherein said first polymer component and said second polymer component are polyester elastomers.

19. The balloon catheter according to claim 16, wherein said first polymer component and said second polymer component are polyamide elastomers.

a⁴ 20. The balloon catheter according to claim 16, wherein said first polymer component (A) and said second polymer component (B) are blended in a weight ratio of (A)/(B) = 98/2 to 10/90.

21. The balloon catheter according to any one of claims 1 to 3 and 6 to 8, wherein said first tubular member is deployed to pass through the interior of said balloon, and the balloon catheter has such structure that said balloon and the outer surface of said first tubular member are concentrically fused near the distal end of said catheter; and a second tubular member configuring the outer surface of said

ac catheter is made from a material that can be fused with said balloon, and is deployed and connected on the proximal side of said balloon.

26. The balloon catheter according to 22, wherein length of said straight tube part in longitudinal axis direction is adjusted within a range of 8 mm to 80 mm.

as 27. The balloon catheter according to any one of claims 1 to 3 and 6 to 8, wherein said balloon catheter is a rapid exchange type balloon catheter having a structure in which the proximal end of said first tubular member is opened midway along the catheter shaft.

28. The balloon catheter according to any one of claims 1 to 3 and 6 to 8, wherein the leading end part of said balloon catheter comprising said balloon is protected by a protective device comprising a protective pipe part for protectively covering said leading end part comprising said balloon, and a coupling adapter for coupling with a flushing fluid supplying instrument so as to be freely detachable.

Please add the following new claims 32-37:

ab 32. The balloon catheter according to claim 5, wherein said polyamide elastomer material has a hard segment and a soft segment in its molecule; and ratio of soft segment in the material configuring said balloon is adjusted to be less than the ratio of soft segment in the material configuring the outermost surface of said first tubular member or the material configuring the layer thereof adjacent to said balloon.

33. The balloon catheter according to claim 9, wherein said polyester elastomer material has a hard segment and a soft segment in its molecule; and ratio

of soft segment in the material configuring said balloon is adjusted to be less than the ratio of soft segment in the material configuring the outermost surface of said first tubular member or the material configuring the layer thereof adjacent to said balloon.

34. The balloon catheter according to claim 33, wherein: said polyester elastomer material is a polyester elastomer having a hard segment and a soft segment in its molecule; and ratio of said soft segment is adjusted to be larger than 13%.

35. The balloon catheter according to claim 10, wherein said polyamide elastomer material has a hard segment and a soft segment in its molecule; and ratio of soft segment in the material configuring said balloon is adjusted to be less than the ratio of soft segment in the material configuring the outermost surface of said first tubular member or the material configuring the layer thereof adjacent to said balloon.

36. The balloon catheter according to claim 35, wherein: said polyester elastomer material is a polyester elastomer having a hard segment and a soft segment in its molecule; and ratio of said soft segment is adjusted to be larger than 13%.

37. The balloon catheter according to 24, wherein length of said straight tube part in longitudinal axis direction is adjusted within a range of 8 mm to 80 mm.